

**WHAT IS CLAIMED IS:**

1. A method of seeking, accessing or connecting to an object via the Internet comprising the steps of:

addressing the object by a telephone number known by the seeker to be related to the intended object;

5 using an Internet Uniform Resource Identifier (URI) or Uniform Resource Locator (URL) or other Resource Handle Identifier (RHI) compliant form of target object address where the highest level domain components (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> level etc.) after the Top Level Domain (TLD) are comprised of telephone numbers and/or portions of telephone numbers and/or variations of telephone numbers;

10 using a telephone number including any or all of: a basic subscriber telephone number, national or international telephone number, extension, line number, exchange, area code, city code, local code, region code, country code, other code, custom prefix or suffix digits, delimiting characters, letters or special characters or characters of an international character set;

15 using a supported Top Level Domain (TLD) that is either a current TLD such as .com, .net, .org, .edu, .mil, .gov, .int, etc. or a future TLD such as .info, .pro, .museum, .biz etc. or a Country Code Top Level Domain (ccTLD) such as .us, .ca, .ac etc. or a custom TLD such as .X, .map, .enum, .e164, .0, .1 etc. or a TLD composed of a telephone number in its entirety or any specific portion thereof;

using a Domain Name System and Domain Name Server(s) (DNS) capable of translating and/or resolving any form of user submitted telephone number URI/URL/RHI into an actual or pseudo IP address;

- 25 using software in the form of applications or services capable of performing useful work with a resolved IP address such as standard message, e-mail, voice, video and multi-media software, web browsers, file sharing servers or any other software that would benefit from the conversion of a telephone number to an IP address.

2. A method of sending a message via the Internet to an Internet address associated with the intended recipient comprising the steps of:

sending a message to the intended recipient by addressing the message to a telephone number known by the sender to be related to the intended recipient;

- 5 using an Internet Uniform Resource Identifier (URI) or Uniform Resource Locator (URL) or other Resource Handle Identifier (RHI) compliant form of target message address where the highest level domain components (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> level etc.) after the Top Level Domain (TLD) are comprised of telephone numbers and/or portions of telephone numbers and/or variations of telephone  
10 numbers;

using a telephone number including any or all of: a basic subscriber telephone number, national or international telephone number, extension, line number, exchange, area code, city code, local code, region code, country code,

- other code, custom prefix or suffix digits, delimiting characters, letters or special
- 15 characters or characters of an international character set;

- using a supported Top Level Domain (TLD) that is either a current TLD such as .com, .net, .org, .edu, .mil, .gov, .int, etc. or a future TLD such as .info, .pro, .museum, .biz etc. or a Country Code Top Level Domain (ccTLD) such as .us, .ca, .ac etc. or a custom TLD such as .X, .map, .enum, .e164, .0, .1 etc. or a
- 20 TLD composed of a telephone number in its entirety or any specific portion thereof;

- using a Domain Name System and Domain Name Server(s) (DNS) capable of translating and/or resolving any form of user submitted telephone number URI/URL/RHI into an actual or pseudo IP address;
- 25 using software in the form of applications or services capable of performing useful work with a resolved IP address such as standard message, e-mail, voice, video and multi-media software, web browsers, file sharing servers or any other software that would benefit from the conversion of a telephone number to an IP address.

3. A method as in claim 2; wherein the message is a traditional Internet e-mail message.

4. A method as in claim 2; wherein the message is an instant or immediate message.

5. A method as in claim 2; wherein the Uniform Resource Identifier (URI) or Uniform Resource Locator (URL) or other Resource Handle Identifier (RHI) is comprised of a telephone number and/or other handle either symbolic of a telephone number and/or incorporating a portion of a telephone number and/or an identifying name or subgroup name or other entity handle at the telephone number location, and the component digits or natural conventional portions of the telephone number may be separated by, periods, dashes, at signs, international characters or other special purpose characters.

6. A method as in claim 5; wherein the telephone number is preceded by or followed by some arbitrary number letters and/or digits and/or special characters and/or international characters; and the characters preceding of following the telephone number may symbolically indicate direct (without need of filling out an interactive browser form) or indirect (requires an interactive browser form) actions to be taken against the included telephone number; and the characters preceding of following the telephone number may include an authorizing Personal Identification Number (PIN) and/or additional identification information.

7. A method as in claim 6; wherein the telephone number is being used as a direct e-mail (e-mail) source or destination address.

8. A method as in claim 6; wherein the telephone number is being used as a direct immediate message or instant message source or destination address.

9. A method as in claim 6; wherein the telephone number is being used as a direct web site retrieval address.

10. A method as in claim 6; wherein the telephone number is being used as a direct self contained URI/URL/RHI instant message or immediate message or web site message posting or bulletin board posting or e-mail destination address; and the message or e-mail is entered directly into the Internet web browser URI/URL address line as a single line entry of less than or equal to the maximum number of characters allowed by the application software.

11. A method as in claim 6; wherein the telephone number is being used as a direct self contained URI/URL/RHI instant message or immediate message or e-mail destination address; and the message or e-mail is entered directly into the Internet web browser or other application URI/URL address line as a single line entry of less than or equal to the maximum number of characters allowed by the application software.

12. A method as in claim 1; wherein the subscriber of a telephone number has the ability to establish one or more personal databases (objects) that can be made universally available by any telephone number subject to the security constraints imposed by the telephone number subscriber.

13. A method as in claim 1; wherein the subscriber of a telephone number has the ability to post and share one or more files or web pages (objects) that can be made universally available by any telephone number subject to the security constraints imposed by the telephone number subscriber.

14. A method as in claim 6; wherein the telephone number is being used as a direct self contained URI/URL/RHI command line for the purpose of directly or indirectly setting the activity and/or status of a telephone number or its owner or one of its member groups or member entities.

15. A method as in claim 6; wherein the telephone number is being used as a URI/URL/RHI for the purpose of directly or indirectly querying the activity and status of a telephone number or its owner or one of its member groups or member entities.

16. A master telephone number subscriber database comprising: all telephone numbers, name and address of telephone number subscribers,

subscriber personal details, subscriber network access details, subscriber DTMF access and command entry definition details, subscriber voice activated access and command entry details, type of each telephone number (Ex. voice/fax/pager etc.), voice mail access pass codes, e-mail access pass codes, web access pass codes and other access permissions, grant lists and pass codes, associations between telephone numbers and subscribers, subscriber/device availability dates and times of day, subscriber assigned handles, subscriber billing, subscriber devices (Ex. PDA, pager, handheld computer, cellular/satellite/fixed telephone etc.), subscriber device locations, location details, subscriber locations, device query capabilities, device command capabilities, E164.ARPA compatible database records, command codes, group definitions, group members, group schedules, status history, location history, viewer history, update history, web page links, internal task lists and schedules, external task lists and schedules, personal calendars and schedules, status and activity codes and definitions, database individual element read/write security permission levels, grants and excludes, communication network owner/operator details, automatic message forwards, master status, activity and location code translation templates, subscriber status, activity and location translation templates, registered e-mail sources, trusted e-mail sources, subscribers blocked and/or allowed, subscriber rating within subscriber community, revelations, emergency contacts, E911 people guidance, E911 pet guidance, E911 personal property information, E911 real property information, E911 floor plans, E911 hazardous material information, subscriber special capabilities, subscriber vehicle and boat and plane information, watch lists, inform lists, device configurations, subscriber and

device time zones, subscriber created extensible data sets; and any other relevant subscriber information.

17. A database as in claim 16, wherein the telephone number is the source, destination, root, object or key to or of all operations and every telephone number is associated with at least one subscriber and one device, perhaps more than one device, however not every device has an associated telephone number,
- 5 thus telephone numbers are owned indirectly via the device when appropriate, an entire household of devices (Ex. tv's, stereo, microwave oven etc.) could own (be assigned to) a single telephone number.

18. A database as in claim 16, wherein identification handles are created by registered subscribers on behalf of devices, handles can give a device a personalized mnemonic touch, a device may be referenced by its handle by anyone on the Internet worldwide (subject to subscriber security constraints), a
- 5 device can have more than one handle simultaneously. A device does not have to have a handle as it could be implicitly or explicitly associated with a telephone number. Ex: the handles "microwave" and "oven" might both be linked to the same physical device operating at a fixed residential telephone number location. The status display query URI/URL/RHI for this kitchen appliance would be
- 10 microwave.410.849.8989.ac this would display the status of the specific kitchen device behind the handle "microwave" at the telephone number 410.849.8989



subscriber residence, alternatively the display query could have been  
oven.410.849.8989.ac and the same status/activity page would be displayed.

19. A database as in claim 16, wherein subscribers (telephone number  
owner/holder) control all devices and handles, all devices and handles must  
belong to a subscriber, only one subscriber can own a device or handle at any  
given instant, a subscriber may control many devices and handles simultaneously.

20. A database as in claim 16, wherein current device location, speed and  
direction are maintained and historically archived for subsequent retrieval and  
analysis.

21. A database as in claim 16, wherein is maintained a table of  
geographic location coordinates (LAT/LON) and their associated common  
everyday names (Ex. house/business name and address, road mile markers,  
intersections, parks, lakes, rivers, common place names etc.)

22. A database as in claim 16, wherein subscribers can create their own  
custom table of locations by LAT/LON vicinity and these locations can have  
custom subscriber designed impacts upon operations such as proximity alerts,  
command execution triggers, message generation, status/activity state changes  
etc. (Ex: office, home, beach house, club, retreat, mile marker, intersection etc.)

23. A database as in claim 16, wherein every “thing” or pseudo “thing”, which can set a status, have its status set or generate a status, be monitored or be commanded is a device; every device is unique, every device belongs to a subscriber, a device is generally associated with a subscriber location, location information can be dynamically updated by a location monitoring capable device. A device may be registered or unregistered. A registered device means that the device has been proven to exist and to belong to a known subscriber. (Ex: desk telephones, cell telephones, computers, pda, pcd, stoves, cars, furnaces, HVAC, microwaves, freezers, motors, health monitors etc.)

24. A database as in claim 16, wherein is a table noting when (date/time range) is a device available for receiving messages or commands and from whom is it willing (allowed subscribers / external entities) to receive messages or commands, temporary overrides are defined elsewhere.

25. A database as in claim 16, wherein details pertaining to what a device is capable of, what data can be queried of the device, what status conditions can it report. Ex: hvac system – what rooms are being heated or cooled – average usage – current temperature, stove with 4 or 6 burners - which are turned on/off, oven or freezer - temperature or home entertainment system – how many CD’s are loaded, which one is currently playing.

26. A database as in claim 16, wherein details pertaining to what a device is capable of, what can device be commanded to perform, what status conditions can it report. Ex: hvac system – set rooms to be heated or cooled – min/max usage – set temperature, stove with 4 or 6 burners - turn right rear off and left front on, oven or freezer – set temperature and time to engage or home entertainment system – load a CD, start CD playing, stop CD playing if telephone rings.

27. A database as in claim 16, wherein is a table of the nouns, verbs and adjective subscriber defined command code language abbreviations and definitions. Some of these are shared universal templates available to be copied, privatized and then further customized by anyone anywhere.

28. A database as in claim 16, wherein groups are based at their core upon telephone numbers. Every group has a responsible subscriber/owner, the owner may be another group, groups can be nested n levels deep, a group can own multiple other groups, a group can be a member of multiple other groups, every telephone number is a group of at least one (itself) by default. Groups are ultimately treatable as lower level domains in a URI/URL/RHI format and are automatically relative to the operationally identical base TLD's .com, .net, .org, .ac, .vg, .tc, .tf, .pn, .ag etc. (at least one of these TLD's should always be up and operational for redundancy). We will not store the TLD as part of the group entry

10 so as to have run time flexibility to migrate between TLD's or to have TLD's  
provide overarching shades of meaning or differentiation. In the group:  
rrburner.stove.appliance.house.849.8989.410 rrburner (right rear burner) is a  
member of the stove group which is a member of the appliance group which is a  
member of the house group which is a member of the 849.8989.410 telephone  
15 number group. In addition, the stove group might also be a member of the maytag  
group. The 849.8989.410 entity is the root master group because it is a telephone  
number. The rrburner group is an owner subordinate group to the 849.8989.410  
group.

29. A database as in claim 16, wherein the members of a group may be a  
mixture of devices and / or other entire groups (and any of their subordinate sub-  
groups)

30. A database as in claim 16, wherein tables will capture the status  
changes both of devices and of owners, an owner may have an overall status,  
however a subscriber owner's devices (stove, fridge, windows, doors) may be in  
many different status condition states simultaneously (Ex. on/off, open/closed,  
5 heating/cooling etc.) status change history tables are also maintained.

31. A database as in claim 16, wherein tables will capture the location  
changes of both devices and of owners, an owner may have a current location,

however an owner's devices (Ex. pda, car, stove, cell telephone etc.) may be in many different geographic locations simultaneously, location history tables are  
5 also maintained.

32. A database as in claim 16, wherein an audit history table of who has viewed or attempted to view an owner's personal or public data is maintained, if view was from an unregistered user only the IP will be shown, also shown are registered users who tried to view data using an incorrect pin/password.

33. A database as in claim 16, wherein an audit history table of who has updated an owner's public or private data is maintained, if update was from an unregistered user only the IP will be shown, also shown is who tried to change data using an incorrect pin/password.

34. A database as in claim 16, wherein a table of web page links associated with an owner or telephone number is maintained, there may be several links associated with an owner or telephone number, a default public/private status condition and public/private personal information page may  
5 be associated with a subscriber telephone number.

35. A database as in claim 16, wherein is maintained a table containing personal internal task to-do list items pertaining to the telephone subscriber. Only

the device / telephone number owner/subscriber can add to their Internal task to-do schedule list. The internal task list may be visible to both the subscriber and  
5 selected other parties subject to subscriber security settings.

36. A database as in claim 16, wherein is maintained a table containing personal external task to-do list items pertaining to the telephone subscriber. Generally, outsiders can append any message or schedule any task to any  
5 telephone number's external task list, in addition the owner can post an item here for the outside world to view, generally a task is something due in the next 24 hours, the owner can transfer an external task placed by another owner to his schedule calendar for a future date.

37. A database as in claim 16, wherein is maintained a calendar table where a subscriber's master schedules are kept, as these assignments draw near in time (~24 hours) they are added to the task list (internal / external or both), others can attempt to add a schedule item to a subscriber (subject to security settings),  
5 first it will go to the subscriber's external task list, from there, if the subscriber approves, it may be transferred to the master schedule with confirmation back to the requester.

38. A database as in claim 16, wherein is maintained a table of status condition codes. By default, only a subscriber owned device can status its owner,

however, an owner may want to allow others to status him with a specific status code (such as a dispatcher or family member) exceptions as to who can post a  
5 status can be defined per subscriber.

39. A database as in claim 16, wherein is maintained a table of public and private view and update security on a data element by data element basis per subscriber.

40. A database as in claim 16, wherein an owner may have up to five passwords for viewing and up to five passwords for performing updates. A password is associated with a security level, 0 is the most secure level and is reserved for system routines, and 7 is the least secure level and indicates general  
5 public access (non members) no password required. Level 6 is the default security level, makes items available to registered subscribers within the subscriber community, but not the general public. A level 6 can do all that a level 7 can, a level 5 all that levels 6 and 7 can, a 4 all that 5, 6 and 7 can etc. Passwords for a given level (from 1 to 6) can be the same or different for viewing  
10 and updating permissions.

41. A database as in claim 16, wherein a table is maintained of the actual corporations responsible for operating specific landline and/or RF networks and

their associated rules and usage templates for e-mail and instant messaging formats.

42. A database as in claim 16, wherein a table defines the rules for message forwarding, a given message from a given source address will be forwarded to a given destination address based upon these forwarding rules, the rules include days of the week and times of day.

43. A database as in claim 16, wherein is maintained a table of e-mail addresses that are known to belong to registered users in as much as they were provided by registered subscribers themselves. To be a registered subscriber, must have received a valid Caller-ID ANI identification and PIN registration from at least one device belonging to a subscriber. Alternatively the subscriber can fax a billing statement and PIN for a device in question to complete the registration. The more devices the subscriber has registered the higher the confidence rating for a subscriber will be. Other members can use this confidence rating to make decisions about their willingness to converse. Negative feedback about a subscriber will also be tracked and can be used by other members to make transaction decisions.

44. A database as in claim 16, wherein is maintained a table of source subscribers from which this target subscriber does or does not wish to receive e-



mail, instant messages, alerts or from which this owner does not want status, schedule and external task list items initiated, this can be recipient device specific

5 so as to allow receipt of message to the home telephone number account but not to the PDA or cellular telephone number e-mail account or to the subscriber's external task list.

45. A database as in claim 16, wherein is maintained a table of ratings that subscriber community members bestow upon one another, there is no limit to the number of ratings that an individual subscriber can receive, however a given subscriber can only rate another particular subscriber once per system defined

5 interval, only registered subscribers can give other subscribers ratings.

46. A database as in claim 16, wherein is maintained a table of permissions to allow subscribers to allow other registered subscribers access to their groups on a temporary or subscriber specific basis, this eliminates the need to give someone else a password to see your data, thus you can open the door to

5 another owner for a day or a week and not have to change any of your passwords when their need to know evaporates, these permissions can be applied on a data set by data set basis.

47. A database as in claim 16, wherein is maintained a table of other subscribers such as neighbors, next of kin etc. who can be contacted with regard

to the subscriber. May allow for an even faster first response than from E911,  
from a trusted neighbor for instance.

48. A database as in claim 16, wherein is maintained a table of  
information that may be helpful to emergency first responders such as neighbors,  
police, fire, and EMS. Can also be used for quick missing person or child  
identification picture posting.

49. A database as in claim 16, wherein is maintained a table of  
information that may be helpful to emergency first responders such as neighbors,  
police, fire, and EMS. Can also be used for quick missing pet identification  
picture posting.

50. A database as in claim 16, wherein is maintained a table of  
information that may be helpful for crime investigation and property recovery by  
police or FBI. Can also be used for quick fixed property owner identification  
posting, images can be called up in the field by police, the pawn shop or  
5 concerned citizens.

51. A database as in claim 16, wherein is maintained a table of  
information that may be helpful to emergency first responders such as police, fire,  
and EMS. Can also be used for quick real property owner identification and floor

plan / water availability / hazardous material fire fighting planing, other special  
5 real property tactical issues.

52. A database as in claim 16, wherein is maintained a table of what are  
the special capabilities of this subscriber (Ex. language, rescue, medical, tow  
truck etc.), indicates whether subscriber is generally available to volunteer their  
service in an emergency or for commercial hire.

53. A database as in claim 16, wherein is maintained a table of land  
vehicles, a subscriber may have several land vehicles, a device ID would also be  
permanently affiliated with a vehicle because a vehicle is a “thing” all “things”  
are devices, enforcement access is allowed if you want friendly cops to call you  
5 via cell telephone / pda prior to tow away or ticket or locking boot.

54. A database as in claim 16, wherein is maintained a table of watch lists  
allowing subscribers to monitor other subscribers and/or their devices for specific  
status condition changes or status remark keywords, this only works if the  
watching owner has password approval to the level of being able to view a  
5 particular subscribers status, or the watcher needs to be in the watched parties  
Revelations table.

55. A database as in claim 16, wherein is maintained a table of inform lists allowing subscribers to inform other subscribers and/or their devices of this owner's specific status condition changes or status remark keywords, this only works if the informing subscriber has password approval to the level of being  
5 able to view a particular other subscriber's status, or the informer needs to be in the informed parties Revelations table.

56. A database as in claim 16, wherein is maintained a table of configurations defining the specifications for desired display formats for various subscriber generated queries on various subscriber devices, defined from the point of view of the eye of the beholder.

57. A database as in claim 16, wherein is maintained a table of time zones, a description of time zones and their bearing on system parameters, zones are + or - relative to GMT.

58. A database as in claim 16, wherein is maintained a table of fields for a subscriber defined data set, subscribers can define data sets each of which is accessible on the web via any one of their telephone numbers.

59. A method as in claim 3; further comprising the steps of: query of a master telephone number subscriber database relating all of the telephone

numbers associated with a particular subscriber; and allowing or disallowing a particular application or service to perform operations upon, to or from the given

5 telephone number.

60. A method for addressing an Internet website, comprising:

associating a telephone number with a desired website;

contacting said desired website by using said telephone number as an address for said desired website.

61. A method for sending an electronic message to an intended recipient over the Internet, said method comprising:

associating a telephone number with said intended recipient;

sending a message over the internet said intended recipient by using said

5 telephone number as an address for said desired website.